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(54) FUNCTION MEMBER HAVING INTRA-SURFACE ORIENTED AND POLYMERIZED THIN FILM AND ITS PRODUCTION

(57)Abstract:

**PURPOSE:** To obtain the function member which is homogeneous and has the polymerized thin film having an excellent intra-surface orientability by providing a specific polymerized film which is directly formed on the intra-surface anisotropic part of a substrate and is formed by being transmitted with the intra-surface anisotropic information formed in the intra-surface anisotropic part of the substrate to the surface of the film in the form in which the direction of the main chain of functional group of the high polymer is intra-surface anisotropic.

**CONSTITUTION:** This member has the structure in which the polymerized thin film is directly formed on the substrate imparted with the intra-surface anisotropy in such a manner that the intra-surface directivity of adsorption molecules can be controlled. The direction of the monomer directly adsorbed on the substrate is determined by the intra-surface anisotropy imparted on the substrate, by which the intra-surface anisotropy of the polymerized thin film in direct contact with the substrate is attained; further, the polymerized film is formed in the state of having the orientability to the film surface. In addition, the polymerized film consists of the addition polymerized film or condensation polymer film exclusive of a ring opening polymer. The condensation polymer or polyaddition polymer has a polar group in the monomer and polymer and, therefore, has a hydrogen bonding power; in addition, the polymer is the rigid high polymer and, therefore, the polymer has the excellent intra-surface anisotropy. The function member having the polymerized thin film which is excellent in the intra-surface orientability is obtd. in this way.

## LEGAL STATUS

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